

CLAIMS

1. What I claim as my invention is substituting laser-pierced smaller diameter holes in spinnerets for presently used larger mechanically drilled holes through which viscous fluids flow to produce continuous synthetic filaments with surface irregularities producing yarns and cords with stronger cord-to-rubber bonding thereby reducing tread separation in tires.

2. What I also claim as my invention is the addition of continuous wave or pulsed sonic generators of optimum frequency and very low amplitudes at the rear of spinneret housings which produce circumferential ridges and valleys in the spun filaments with additional increases in cored-to-rubber bonding thereby reducing tread separation in tires.

3. What I also claim here is the acid etching of steel wires at the end of current production lines to give the appearance of etched glass will also contribute to significant increases in steel-to-rubber bonding thereby reducing tread separation in tires.